

This circular will be sent regularly to all who apply for it.

United States Department of Agriculture,

WASHINGTON, D. C., October 31, 1916.

MONTHLY LIST OF PUBLICATIONS.

[OCTOBER, 1916.]

READ CAREFULLY BEFORE ORDERING.

A copy of any of the publications listed herein, except those otherwise noted, may be obtained free upon application to the Editor and Chief of the Division of Publications, United States Department of Agriculture, Washington, D. C., as long as the department's supply lasts.

After this department's supply is exhausted, publications can still be obtained from the Superintendent of Documents, Government Printing Office, Washington, D. C., but by purchase only, and at the prices noted herein.

Send all remittances to the Superintendent of Documents direct. His office is not a part of the Department of Agriculture.

SPECIAL NOTICE.

Before mailing your request be sure and see that your name and complete post office address (street number or rural route number as the case may be) is attached.

FARMERS' BULLETINS—FOR FREE DISTRIBUTION.

NOTE.—The department's supply of the current numbers of Farmers' Bulletins is ordinarily sufficient to make it possible to send them free to all applicants. They are also for sale at 5 cents per copy.

The Bedbug. By C. L. Marlatt, Entomologist and Assistant Chief of the Bureau. Pp. 12, figs. 4. Contribution from the Bureau of Entomology. Oct. 14, 1916. (**Farmers' Bulletin 754.**)
For general distribution.

Common Birds of Southeastern United States in Relation to Agriculture. By F. E. L. Beal, W. L. McAtee, and E. R. Kaibach, Assistant Biologists. Pp. 40, figs. 20. Contribution from the Bureau of Biological Survey. Oct. 26, 1916. (**Farmers' Bulletin 755.**)
The food habits and relation to agriculture of 23 species of birds common in the Southeastern States are described: of general interest, but especially applicable to the section covered.

Culture of Rye in the Eastern Half of the United States. By Clyde E. Leighly, Agronomist in Charge of Eastern Wheat and Rye Investigations. Pp. 16, figs. 8. Contributions from the Bureau of Plant Industry. Oct. 11, 1916. (**Farmers' Bulletin 756.**)

Suitable for distribution in territory above described.

Commercial Varieties of Alfalfa. By R. A. Oakley, Agronomist, and H. L. Westover, Scientific Assistant, Office of Forage-Crop Investigations. Pp. 24, figs. 7. Contribution from the Bureau of Plant Industry. Oct. 12, 1916. (**Farmers' Bulletin 757.**)

Intended for general distribution and will be of interest to farmers in all parts of the United States where alfalfa can be grown.

"White Ants" As Pests in the United States and Methods of Preventing Their Damage. By T. E. Snyder, Specialist in Forest Entomology, Forest Insect Investigations. Pp. 20, figs. 14. Contribution from the Bureau of Entomology. Oct. 9, 1916. (**Farmers' Bulletin 759.**)

Suitable for general distribution.

How to Attract Birds in Northwestern United States. By W. L. McAtee, Assistant Biologist. Pp. 12, figs. 11. Contribution from the Bureau of Biological Survey. Oct. 16, 1916. (**Farmers' Bulletin 760.**)

Suggests means of providing a food supply for wild birds about homesteads in Oregon, Washington, Montana, Idaho, and northern parts of California, Nevada, and Utah.

Management of Muck-Land Farms in Northern Indiana and Southern Michigan. By H. R. Smalley, Assistant Agriculturist. Pp. 26, figs. 12. Contribution from the Office of Farm Management, Office of the Secretary. Oct. 10, 1916. (**Farmers' Bulletin 761.**)

Should be of interest to muck-land farmers of northern Indiana and southern Michigan and also to farmers in other sections of the country where soil and climatic conditions are similar or comparable.

The False Chinch Bug and Measures for Controlling It. By F. B. Milliken, Scientific Assistant, Truck Crop and Stored Product Insect Investigations. Pp. 4, figs. 2. Contribution from the Bureau of Entomology. Oct. 21, 1916. (**Farmers' Bulletin 762.**)

For general distribution.

Cotton Ginning Information for Farmers. By Fred Taylor, Cotton Technologist; D. C. Griffith, Investigator in Cotton Marketing; and C. E. Atkinson, Assistant in Cotton Marketing. Pp. 24, figs. 23. Contribution from the Office of Markets and Rural Organization. Oct. 31, 1916. (**Farmers' Bulletin 764.**)

Should be of interest to cotton merchants, factors, ginners, and others of the trade.

Game Laws for 1916. A Summary of the Provisions Relating to Seasons, Export, Sale, Limits, and Licenses. By T. S. Palmer, W. F. Bancroft, and Frank L. Earnshaw, Assistants, Biological Survey. Pp. 64. Contribution from the Bureau of Biological Survey. Oct. 9, 1916. (**Farmers' Bulletin 774.**)

Contains the proclamation of the President and the amended Regulations for the Protection of Migratory Birds, approved Aug. 21, 1916, and the treaty with Great Britain for the protection of migratory birds in the United States and Canada, ratified Aug. 29, 1916.

Laws Relating to Fur-Bearing Animals, 1916. A Summary of Laws in the United States and Canada Relating to Trapping, Protection, Propagation, and Bounties. By D. E. Lantz, Assistant Biologist. Pp. 28. Contribution from the Bureau of Biological Survey. Oct. 19, 1916. (**Farmers' Bulletin 783.**)

Is intended for general distribution among persons interested in fur farming, trapping, and the fur trade.

DEPARTMENT BULLETINS.—TECHNICAL.

The publications listed below are technical or scientific treatises or bulletins applying to a special industry or locality. The edition is limited, but they will be furnished free to persons who can use such specialized information as long as the supply lasts. However, to insure prompt receipt, remit price to the Superintendent of Documents.

Forests of Porto Rico, Past, Present, and Future, and Their Physical and Economic Environment. By Louis S. Murphy, Forest Examiner, in cooperation with the Government of Porto Rico Board of Commissioners of Agriculture. Pp. 39, pls. 12, figs. 3, map. Contribution from the Forest Service. Oct. 20, 1916. (**Department Bulletin 354.**) Price, 25 cents.

No copies available for free distribution.

The Intrinsic Values of Grain, Cottonseed, Flour, and Similar Products, Based on the Dry-Matter Content. By E. G. Boerner, Assistant in Grain Standardization. Pp. 32, figs. 3. Contribution from the Bureau of Plant Industry. (Professional Paper.) Oct. 17, 1916. (**Department Bulletin 374.**) Price, 5 cents.

Shows the percentage of water contained in various grains, flours, and cottonseed, and explains the benefits derived by drying said products before marketing same.

Economic Surveys of County Highway Improvement. By J. E. Pennybacker, Chief of Road Economics, and M. O. Eldridge, Assistant in Road Economics. Pp. 86, pls. 36. Contributions from the Office of Public Roads and Rural Engineering. Oct. 23, 1916. (**Department Bulletin 393.**) Price, 35 cents.

A compilation and analysis of data in eight selected counties, showing comparative financial burdens and economic benefits resulting from highway improvement during a period of years.

Second Annual Report of Bird Counts in the United States, With Discussion of Results. By Wells W. Cooke, Assistant Biologist. Pp. 20, fig. 1. Contribution from the Bureau of Biological Survey. Oct. 23, 1916. (**Department Bulletin 396.**) Price, 5 cents.

This second report on the number and relative abundance of wild birds is for the information of workers and others interested in the protection and increase of birds.

Cereal Experiments at the Judith Basin Substation, Moccasin, Montana. By N. C. Donaldson, Scientific Assistant, Office of Cereal Investigations. Pp. 42, figs. 17. Contribution from the Bureau of Plant Industry. Oct. 12, 1916. (**Department Bulletin 398.**) Price, 10 cents.

Of interest to farmers and settlers in this part of Montana.

Experiments With Marquis Wheat. By Carleton R. Ball, Agronomist in Charge, and J. Allen Clark, Scientific Assistant, Western Wheat Investigations, Office of Cereal Investigations. Pp. 40, figs. 10. Contribution from the Bureau of Plant Industry. (Professional Paper.) Oct. 26, 1916. (**Department Bulletin 400.**) Price, 10 cents.

Is intended for agronomists, both experimenters and extension workers, and for technical workers in other lines who are concerned with wheat and its products.

Marketing and Distribution of Western Muskmelons in 1915. By O. W. Schleussner, Assistant in Market Surveys, and C. W. Kitchen, Market Station Assistant. Pp. 28, charts 4. Contributions from the Office of Markets and Rural Organization. Oct. 31, 1916. (**Department Bulletin 401.**) Price, 15 cents.

Is of interest to muskmelon growers in the West, shippers, dealers, transportation companies, and consumers, and to all engaged in the trade.

Cereal Experiments at the Akron Field Station, Akron, Colorado. By George A. McMurdo, Assistant, Office of Cereal Investigations. Pp. 35, figs. 11. Contribution from the Bureau of Plant Industry. Oct. 3, 1916. (**Department Bulletin 402.**) Price, 10 cents.

Of interest to settlers in northeastern Colorado, and southeastern Wyoming, southwestern Nebraska, and northwestern Kansas.

Hemp Hurds as Paper-Making Material. By Lyster H. Dewey, Botanist in Charge of Fiber-Plant Investigations, and Jason L. Merrill, Paper-Plant Chemist, Paper-Plant Investigations. Pp. 26, figs. 4. Contribution from the Bureau of Plant Industry. (Professional Paper.) Oct. 14, 1916. (**Department Bulletin 404.**) Price, 5 cents.

Should be useful to all persons who are interested in the economic phases of paper making, especially to print and book paper manufacturers. It also should be of interest to scientific investigators and chemists.

Experiments During 1915 in the Destruction of Fly Larvæ in Horse Manure. By F. C. Cook, Physiological Chemist, Bureau of Chemistry, and R. H. Hutchison, Scientific Assistant, Bureau of Entomology. Pp. 19. Contribution from the Bureau of Entomology and Bureau of Chemistry. Oct. 28, 1916. (**Department Bulletin 408.**) Price, 5 cents.

Suitable for general distribution.

The Recovery of Potash from Alunite. By W. H. Waggaman, Scientist in Fertilizer Investigations, and J. A. Cullen, Analyst. Pp. 14, fig. 1. Contribution from the Bureau of Soils. (Professional Paper.) Oct. 10, 1916. (**Department Bulletin 415.**) Price, 5 cents.

Describes location and extent of the Utah deposits of Alunite, and the method of extracting the potash.

Cooling Hot-Bottled Pasteurized Milk by Forced Air. By S. Henry Ayers, John T. Bowen, and W. T. Johnson, Jr., Dairy Division. Pp. 38, figs. 20. Contribution from the Bureau of Animal Industry. (Professional Paper.) Oct. 27, 1916. (**Department Bulletin 420.**) Price, 10 cents.

Of interest to milk dealers and distributors generally.

The Sugar-Beet Thrips. By William H. White, Scientific Assistant, Truck Crop and Stored-Product Insect Investigations. Pp. 12, pls. 2, figs. 8. Contribution from the Bureau of Entomology. (Professional Paper.) Oct. 26, 1916. (**Department Bulletin 421.**) Price, 5 cents.

Gives history and life habits of this insect and suggests methods of control.

The Eggplant Tortoise Beetle. By Thomas H. Jones, Entomological Assistant, Truck-Crop and Stored-Product Insect Investigations. Pp. 8, figs. 3. Contribution from the Bureau of Entomology. (Professional Paper.) Oct. 2, 1916. (**Department Bulletin 422.**) Price 5 cents.

Describes life history and habits of this insect and suggests methods of control.

Farming on the Cut-Over Lands of Michigan, Wisconsin, and Minnesota. By J. C. McDowell, Agriculturist, and W. B. Walker, Assistant Agriculturist. Pp. 24, figs. 10. Contribution from the Office of Farm Management, Office of the Secretary. Oct. 24, 1916. (**Department Bulletin 425.**) Price, 5 cents.

This bulletin is issued to meet the demand for a publication dealing in a popular manner with the essential problems of this region.

Cereal Experiments on the Cheyenne Experiment Farm, Archer, Wyoming. By Jenkin W. Jones, Scientific Assistant, Office of Cereal Investigations. Pp. 40, figs. 10. Contribution from the Bureau of Plant Industry. Oct. 28, 1916. (**Department Bulletin 430.**) Price, 10 cents.

Of interest to those engaged in dry farming in the higher parts of the northern Plains area.

The Action of Manganese Under Acid and Neutral Soil Conditions. By J. J. Skinner and F. R. Reid, Biochemists, Office of Soil-Fertility Investigations. Pp. 12, figs. 3. Contribution from the Bureau of Plant Industry. (Professional Paper.) Oct. 27, 1916. (**Department Bulletin 441.**) Price, 5 cents.

The results given in this bulletin throw further light on the effect of this catalytic fertilizer under various soil conditions. That its effect is dependent on the reaction of the soil is demonstrated. The bulletin is of interest to scientific investigators, to manufacturers of catalytic fertilizers, and to those growers whose technical training induces them to experiment with new substances to increase or control crop production.

A Study of the Electrolytic Method of Silver Cleaning. By H. L. Lang and C. F. Walton, Jr., Scientific Assistants, Office of Home Economics. Pp. 12. Contribution from the States Relations Service. (Professional Paper.) Oct. 31, 1916. (**Department Bulletin 449.**) Price 5 cents.

Contains information regarding the advantages and limitations of the electrolytic method of cleaning silver and the conditions under which it is most efficient, which it is believed will prove useful to teachers and housekeepers generally.

Improved Apparatus for Determining the Test Weight of Grain, With a Standard Method of Making the Test. By E. G. Boerner, Assistant in Grain Standardization. Pp. 15, figs. 8. Contribution from the Bureau of Plant Industry. (Professional Paper.) Oct. 30, 1916. (**Department Bulletin 472.**) Price, 5 cents.

Of interest to grain dealers and grain inspectors.

MISCELLANEOUS.

Meat Situation in the United States. Pt. 5. Methods and Cost of Marketing Live Stock and Meats. By Louis D. Hall, Specialist, and F. M. Simpson and S. W. Doty, Assistants, in Marketing Live Stock and Meats, Office of Markets and Rural Organization. Pp. 98, pls. 20. Contribution from the Office of Markets and Rural Organization. Oct. 7, 1916. (**Report 113, Office of the Secretary.**) Price, 25 cents.

NOTE.—One of the five reports issued showing the results of various independent inquiries dealing with several phases of the meat industry, undertaken by specialists of the department, at the suggestion of a committee appointed in 1914 by the Secretary to consider the economics of the meat situation; the other four reports were published as Reports Nos. 109, 110, 111, and 112, Office of the Secretary. They are not available for free distribution, but are for sale by the Superintendent of Documents, the price of the five reports being 95 cents.



State Highway Mileage and Expenditures for the Calendar Year 1915. (Prepared by the Division of Road Economics, Office of Public Roads and Rural Engineering.) Pp. 8. Oct. 2, 1916. (Circular 63, Office of the Secretary.) Price, 5 cents.

Suggestions for the Manufacture and Marketing of Creamery Butter in the South. By Roy C. Potts, Specialist in Marketing Dairy Products, Office of Markets and Rural Organization, and William White, Dairy Manufacturing Specialist, Dairy Division of the Bureau of Animal Industry. Pp. 12. Oct. 23, 1916. (Circular 66, Office of the Secretary.) Price, 5 cents.

Contains definite suggestions of interest to those engaged in the creamery business in the South.

SERIALS.

Journal of Agricultural Research. (For sale only.) Vol. 7, No. 1. Oct. 2, 1916. Contents: *Aspergillus niger* Group. (E-5.) By Charles Thom and James N. Currie. Some Effects of the Blackrot Fungus, *Sphaecopsis malorum*, upon the Chemical Composition of the Apple. (Aa-3.) By Charles W. Culpepper, Arthur C. Foster, and Joseph S. Caldwell. Formation of Hematoporphyrin in Ox Muscle during Autolysis. (A-25.) By Ralph Hoagland. Pp. 1-45. Price, 10 cents.

Same. Vol. 7, No. 2. Oct. 9, 1916. Contents: Comparison of the Nitrifying Powers of Some Humid and Some Arid Soils. (Cal.-6.) By C. B. Lipman, P. S. Burgess, and M. A. Klein. Immobility of Iron in the Plant. (B.-11.) By P. L. Gile and J. O. Carrero. Pp. 47-87. Price, 10 cents.

Same. Vol. 7, No. 3. Oct. 16, 1916. Contents: Effects of Nicotine as an Insecticide. (K-43.) By N. E. McIndoo. Acidity and Adsorption in Soils as Measured by the Hydrogen Electrode. (Cal.-5.) By L. T. Sharp and D. R. Hoagland. Pp. 89-145, pls. 1-3. Price, 15 cents.

Same. Vol. 7, No. 4. Oct. 23, 1916. Contents: Life History of *Habrocytus medeaginis*, a Recently Described Parasite of the Chalcid Fly in Alfalfa Seed. (K-44.) By Theodore D. Urbahn. Daily Transpiration During the Normal Growth Period and Its Correlation with the Weather. (G.-95.) By Lyman J. Briggs and H. L. Shauitz. Pp. 147-212, pls. 3; figs. 19. Price, 20 cents.

Same. Vol. 7, No. 5. Oct. 30, 1916. Contents: Studies of *Spongopora subterranea* and *Phoma Tuberosa* of the Irish Potato. (G-96.) By I. E. Melhus, J. Rosenbaum, and E. S. Schultz. Grown Parasitic Fungi in Concentrated Solutions. (G-97.) By Lou A. Hawkins. Pp. 213-260, pls. 9, figs. 1. Price, 20 cents.

NOTE.—Beginning with Volume 5, The Journal of Agricultural Research will be issued weekly and distributed free only to the libraries of agricultural colleges and experiment stations, to large universities, technical schools, and such institutions as make suitable exchanges with the department. It will not be sent free to individuals. The Superintendent of Documents will receive subscriptions for this publication, the price being \$3 per year, 52 numbers.

Experiment Station Record. Vol. XXXV, No. 4. Sept. 1916. E. W. Allen, Ph. D., Editor. Pp. 391-400. Price, 15 cents.

Same. Vol. XXXV, No. 5. Oct., 1916. Pp. 401-500. Price, 15 cents.

NOTE.—The Record is a technical review of the world's scientific literature pertaining to agriculture. It is not intended for general distribution, and its free distribution is restricted to persons connected with the agricultural colleges, experiment stations, and similar institutions, and to libraries and exchanges. It can not be sent free to individuals having no official connection with public institutions. The Superintendent of Documents will receive subscriptions for this publication, which is issued in two volumes a year, ten numbers each, at \$1 a volume.

The Monthly Crop Report. Vol. 2, No. 10, Oct., 1916. Pp. 97-168. (Bureau of Crop Estimates.)

Contains data relating to agriculture, including estimates of acreage, conditions, yield, prices, and value of crops and live stock. For free distribution.

PUBLICATIONS OF THE WEATHER BUREAU.

Publications of the Weather Bureau are obtainable only from the Chief of the Weather Bureau or the Superintendent of Documents, Government Printing Office, at the prices noted herein.

Monthly Weather Review. (For sale only.) Vol. 44, No. 7. July, 1916. Pp. 381-429, charts 9, figs. 3. Price, 25 cents a copy, \$2.50 a year. Payable to the Superintendent of Documents.

Special Articles: Solar and sky radiation measurements during July, 1916. By H. H. Kibball. Investigations in the upper air of Australia. By Griffith Taylor. Classification of the hydrometers. Pt. 1. By G. Hellmann. Variability of temperatures. By A. Angot. Weather forecasting in the United States. By A. J. Henry and others. New South Wales rainfall. By D. J. Mares. Hurricane of July 5, 1916, at Pensacola, Fla. By W. E. Reed, Jr. Hurricane of July 5-6, 1916, at Mobile, Ala. By A. Ashenberger. Tropical hurricane of July 5, 1916, in Louisiana. By I. M. Chino. South Carolina hurricane of July 13-14, 1916. By J. H. Scott. Rivers and floods, July, 1916. By A. J. Henry. Method for forecasting the maximum summer level in Lake Tahoe. By H. E. Alciatore. Annual rise in the Columbia. By Floyd D. Young. Great Lakes levels during July, 1916.

National Weather and Crop Bulletin. No. 29. Special for September and October 1-10, 1916, reporting temperature, rainfall, and crop conditions throughout the United States. (Issued weekly, on Wednesday, April to October; monthly remainder of year.) Price, 25 cents a year.

JOS. A. ARNOLD.

Editor and Chief Division of Publications.